IN THE CLAIMS:

1. (ORIGINAL) A Multi-level Analog Signaling (MAS) method comprising encoding data bits represented by multi-level analog signals; transmitting the encoded data bits over at least two multi-level signal buses between a transmitter and a receiver such that, on each multi-level signal bus, during each data bit period the signal level is required to change from a first signal level to a second, different signal level; and indicating a data boundary to the receiver by holding one of the multi-level signal buses at the same level for at least two consecutive bit periods.

2. (ORIGINAL) A method as in claim 1, where encoding includes, when a data bit to be encoded is the same as the data bit encoded for an immediately prior bit period, encoding instead a strobe signal represented by a predetermined one of the levels of the multi-level analog signal, where the presence of the strobe signal at the receiver is used to generate a clock edge.

3. (ORIGINAL) A method as in claim 2, where the multi-level analog signal comprises a PAM-3 signal, where two analog signal levels convey the encoded data bits and one analog signal level conveys the strobe signal.

4. (ORIGINAL) A method as in claim 1, where the data boundary comprises one of the start or the end of a multi-bit frame.

5. (ORIGINAL) A method as in claim 4, where the multi-bit frame comprises at least 24 bits for conveying 8-bit Red, Green and Blue data between the transmitter and the receiver.

6. (ORIGINAL) A method as in claim 4, where the multi-bit frame comprises at least 24 bits for conveying 8-bit Red, Green and Blue data between a control unit of a mobile station and a display of the mobile station.

7. (ORIGINAL) A method as in claim 4, where the multi-bit frame comprises at least 24 bits for conveying 8-bit Red, Green and Blue data between a control unit of a mobile station and a camera of the mobile station.

8. (ORIGINAL) A method as in claim 1, further comprising transmitting a stream of data between the transmitter and the receiver by toggling one of the at least two multi-level signal buses between first and second signal levels to generate clock edges, and setting, so as to coincide with a generated clock edge, a signal level of another one of the at least two multi-level signal buses at a signal level representative of a logic zero signal level or a logic one signal level.

9. (ORIGINAL) A method as in claim 8, where the receiver of the stream of data performs toggling the one of the at least two multi-level signal buses between the first and the second signal levels to generate clock edges.

10. (ORIGINAL) A method as in claim 8, where a beginning and an end of the stream of data is signaled by setting at least one of the different signal buses to a third signal level.

11. (ORIGINAL) A Multi-level Analog Signaling (MAS) circuit arrangement comprising a transmitter to encode data bits represented by multi-level analog signals; at least two multi-level signal buses coupled between said transmitter and a receiver for conveying the encoded data bits such that, on each multi-level signal bus, during each data bit period the signal level is required to change from a first signal level to a second, different signal level; said transmitter indicating a data boundary to said receiver by holding one of the multi-level signal buses at the same level for at least two consecutive bit periods.

12. (CURRENTLY AMENDED) A ~~mobile station~~ (MAS) circuit arrangement as in claim 11, where said transmitter operates to encode data bits such that, when a data bit to be encoded is the same as the data bit encoded for an immediately prior bit period, the transmitter instead encodes a strobe signal represented by a predetermined one of the levels of the multi-level analog signal, where the presence of the strobe signal at said receiver is used to generate a clock edge.

13. (CURRENTLY AMENDED) A ~~mobile station~~ (MAS) circuit arrangement as in claim 12, where the multi-level analog signal comprises a PAM-3 signal, where two analog signal levels convey the encoded data bits and one analog signal level conveys the strobe signal.

14. (CURRENTLY AMENDED) A ~~mobile station~~ (MAS) circuit arrangement as in claim 11, where the data boundary comprises one of the start or the end of a multi-bit frame.

15. (CURRENTLY AMENDED) A ~~mobile station~~ (MAS) circuit arrangement as in claim 14, where the multi-bit frame comprises at least 24 bits for conveying 8-bit Red, Green and Blue data between said transmitter and said receiver.

16. (CURRENTLY AMENDED) A ~~mobile station~~ (MAS) circuit arrangement as in claim 14, where the multi-bit frame comprises at least 24 bits for conveying 8-bit Red, Green and Blue data between a control unit of a mobile station and a display of the mobile station.

17. (CURRENTLY AMENDED) A ~~mobile station~~ (MAS) circuit arrangement as in claim 14, where the multi-bit frame comprises at least 24 bits for conveying 8-bit Red, Green and Blue data between a control unit of a mobile station and a camera of the mobile station.

18. (CURRENTLY AMENDED) A ~~mobile station~~ (MAS) circuit arrangement as in claim 11, where said transmitter and said receiver cooperate to transmit a stream of data by toggling one of the at least two multi-level signal buses between first and second signal levels to generate clock edges, and by setting, so as to coincide with a generated clock edge, a signal level of another one of the at least two multi-level signal buses at a signal level representative of a logic zero signal level or a logic one signal level.

19. (CURRENTLY AMENDED) A ~~mobile station~~ (MAS) circuit arrangement as in claim 18, where said receiver of the stream of data toggles the one of the at least two multi-level signal buses between the first and the second signal levels to generate clock edges.

20. (CURRENTLY AMENDED) A ~~mobile station~~ (MAS) circuit arrangement as in claim 18, where a beginning and an end of the stream of data is signaled by setting at least one of the different signal buses to a third signal level.

21. (ORIGINAL) A mobile station comprising a plurality of sub-assemblies coupled together by a plurality of data communication buses connected to ports, where at least one port

comprises a Multi-level Analog Signaling (MAS) circuit arrangement comprising a transmitter to encode data bits represented by multi-level analog signals; where a data communications bus that couples the transmitter to a receiver in another port comprises at least two multi-level signal buses for conveying the encoded data bits such that, on each multi-level signal bus, during each data bit period the signal level is required to change from a first signal level to a second, different signal level; said transmitter indicating a data boundary to said receiver by holding one of the multi-level signal buses of the at least two multi-level signal buses at the same level for at least two consecutive bit periods.

22. (ORIGINAL) A mobile station as in claim 21, where said transmitter operates to encode data bits such that, when a data bit to be encoded is the same as the data bit encoded for an immediately prior bit period, the transmitter instead encodes a strobe signal represented by a predetermined one of the levels of the multi-level analog signal, where the presence of the strobe signal at said receiver is used to generate a clock edge.

23. (ORIGINAL) A mobile station as in claim 22, where the multi-level analog signal comprises a PAM-3 signal, where two analog signal levels convey the encoded data bits and one analog signal level conveys the strobe signal.

24. (ORIGINAL) A mobile station as in claim 21, where the data boundary comprises one of the start or the end of a multi-bit frame.

25. (ORIGINAL) A mobile station as in claim 24, where the multi-bit frame comprises at least 24 bits for conveying 8-bit Red, Green and Blue data between said transmitter and said receiver.

26. (ORIGINAL) A mobile station as in claim 24, where the multi-bit frame comprises at least 24 bits for conveying 8-bit Red, Green and Blue data between a cellular engine of said mobile station and a display of said mobile station.

27. (ORIGINAL) A mobile station as in claim 24, where the multi-bit frame comprises at least 24 bits for conveying 8-bit Red, Green and Blue data between a cellular engine of said mobile station and a camera of said mobile station.

28. (ORIGINAL) A mobile station as in claim 21, where said transmitter and said receiver cooperate to transmit a stream of data by toggling one of the at least two multi-level signal buses between first and second signal levels to generate clock edges, and by setting, so as to coincide with a generated clock edge, a signal level of another one of the at least two multi-level signal buses at a signal level representative of a logic zero signal level or a logic one signal level.

29. (ORIGINAL) A mobile station as in claim 28, where said receiver of the stream of data toggles the one of the at least two multi-level signal buses between the first and the second signal levels to generate clock edges.

30. (ORIGINAL) A mobile station as in claim 28, where a beginning and an end of the stream of data is signaled by setting at least one of the different signal buses to a third signal level.

31. (ORIGINAL) A mobile station as in claim 21, where one of said sub-assemblies comprises a cellular engine that is coupled to circuitry external to said mobile station via another port and data communications bus.